

REMARKS/ARGUMENTS

Claims 1 and 19 have been revised to no longer recite a “virus-like” particle, along with a cancellation of Claim 6. These changes better tailor the claims to currently contemplated embodiments of the invention. Applicant expressly reserves the right to present the previous scope of the claims in a continuing application.

Claims 1 and 19 have also been revised to explicitly recite the inherent feature of a “non-infectious” virus particle as previously presented in the claims. Support for this inherent feature is found at least on page 9, line 4, of the application as filed, which states

~~In all aspects of the invention the particle released from the host cells generating the biological particles/carriers is non-infectious.~~

The claim revisions emphasize an inherent feature of the methods as claimed and disclosed, where a non-infectious virus particle is administered. This is in contradistinction to situations where a cell is administered.

Claims 3-5 and 7 have been revised to correct clerical oversights and to correspond to the language of Claim 1.

Claim 8 has been revised to remove the term “tumor-derived”. This is identical to the revision to Claim 8 presented in the Reply of January 29, 2009, which apparently rendered Claim 8 free of all rejections of record.

The claim revisions are necessitated by the Office’s positions as revealed in the Action mailed August 29, 2008. In particular, the revision to Claim 8, which was not previously rejected under any express grounds, is necessitated by the Office’s Action. Applicant respectfully points out that the revisions should be entered because they, at a minimum, reduce the issues for appeal by resolving language in Claim 8.

Shown at least by the situation of Claim 8, the revisions could not have been previously presented. Additionally, no new issue for search or consideration is present.

No new matter has been introduced, and entry of the above revised claims is respectfully requested.

Telephonic interview

Applicant thanks Examiner Blanchard for the courtesy of a telephonic interview with the undersigned on March 4, 2009. Possible claim revisions were discussed for obviating the rejections of record.

The undersigned briefly reviewed aspects of the invention regarding biological production of a virus particle from a cell, which includes

The undersigned also reviewed the limitations of the cited documents, which only report modified cells that do not produce virus particles. The documents also report administration of the modified cells *per se* and so further modification of the cells to produce a virus particle would result in virus producing cells unsuitable for the reported administration.

Subject matter free of the cited documents

Applicant respectfully points out his understanding that Claim 8 is not included in any rejection based upon a cited document. Accordingly, the subject matter of Claim 8 is believed to be allowable over the documents of record. So upon resolution of the alleged indefiniteness issue, as addressed below, the claim is believed to be allowable.

First Alleged Rejection under 35 U.S.C. § 102

Claims 1-7, 16-20, and 23-26 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Hiserodt et al. (USP 6,277,368). Applicant has carefully reviewed the statement of the instant rejection as well as the cited document and respectfully traverse because no case of anticipation is present.

As previously noted, it is well settled law that anticipation requires identity between a claimed invention and a cited prior art document.

But in the instant case, the claimed methods feature the administration of a “virus particle” that is non-infectious. This is in sharp distinction from Hiserodt et al., who fail to teach

or suggest a method including the administration of any virus particle. Additionally, the instant claims require that the “virus particle” have specific features, such as a cellular membrane from the cell which biologically produces the virus particle. As would be understood by the skilled person, a virus particle of the invention obtains a cell membrane as the virus “buds” from the cell.

This is in sharp contrast to the cited document, where no particle with such a membrane is reported by Hiserodt et al. This situation appears to be acknowledged by the instant rejection. Stated differently, the cited document reports a method with administration of cells (and no virus particle with a cellular membrane) while the claims feature the administration of a virus particle. This clearly does not meet the standards for anticipation.

And while Hiserodt et al. may report the use of viral vectors to produce modified tumor cells or tumor cell lines, the vectors used **are not** capable of replication in the cells. Those viral vectors are thus “replication incompetent” or “replication deficient.” Therefore, the cell lines of the cited document do not produce a virus particle with the same features as the particle featured in the rejected claims.

So based on the above, Hiserodt et al. cannot anticipate the claims, and this rejection may be properly withdrawn for these reasons alone.

Alleged Rejection under 35 U.S.C. § 112, second paragraph

Claim 8 was rejected under 35 U.S.C. § 112, second paragraph as allegedly indefinite due to recitation of the term “tumor-derived”.

As presented above, the claim no longer includes the use of this term and so no issue of indefiniteness remains. Reconsideration and withdrawal of this rejection is respectfully requested.

Second Alleged Rejection under 35 U.S.C. § 102

Claims 21 and 22 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Nawrocki et al. (Cancer Treatment Reviews, 25:29-46, 1999). Applicant has carefully

reviewed the statement of the instant rejection as well as the cited document and respectfully traverses because no case of anticipation is present.

As noted above, anticipation requires identity between a claimed invention and a cited prior art document.

But as acknowledged in the statement of the instant rejection, Nawrocki et al. reports the administration of non-tumor cells modified to express various molecules by use of a viral vector. The document is thus deficient against the pending claims because it fails to teach or suggest a method including the administration of a virus particle. It is these particles *per se* (and without the need for cells) that are able to induce immune responses against a tumor antigen in the context of a costimulatory molecule.

Additionally, the viral vectors used to produce modified non-tumor cells **are not** capable of replication in the cells. Those viral vectors are thus “replication incompetent” or “replication deficient.” Therefore, the cell lines of the cited document do not produce a virus particle with the same features as the particle featured in the rejected claims.

So again, the cited document reports a method with administration of cells (and no virus or virus-like particles) while the claims feature the administration of a virus or virus-like particle. Therefore, Nawrocki et al. cannot anticipate the claims, and this rejection may be properly withdrawn.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

Appl. No. 10/528,082
Amdt. dated March 10, 2009
Second Reply to Office Action of August 29, 2008

PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

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